

Laboratory

CAUSTIC OR CORROSIVE AGENTS

Agent Overview: Caustic or corrosive agents (acids or bases) are used in many different types

of manufacturing, cleaning and testing processes. Dermal and ocular exposure can result in local irritation or burn injury, ranging from minor to severe depending on the material and concentration. Inhalation of corrosive gases might result in upper and lower respiratory irritation, leading to stridor, dyspnea, wheezing and pulmonary edema. Ingestion can cause direct injury to

tissue upon exposure and may include oral pain, ulcerations, drooling,

dysphasia, vomiting, and abdominal pain.

Decontamination of patients may be needed prior to sample collection. No biologic marker for exposure available; however, detection of caustic or corrosive agents in environmental samples is available for select materials.

Lab Specimen Submittal: Authorization by Dr. Jane Getchell, Director DPHL; Christina Pleasanton,

Deputy Director DPHL; or Tara Lydick, Chemical Terrorism Coordinator.

Type of Specimens Urine: 25mL-50mL screw-cap container

Necessary for Testing: Whole blood:

- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND

- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND

- Two empty urine cups and two empty blood tubes for each lot # submitted.

Packaging Instructions: Urine: freeze specimen upon collection and ship on dry ice; label specimens

and package individually; wrap with absorbent material.

Whole blood: place filled tubes in a shipping rack for stability, wrap the tubes in absorbent material, and secure with tape. Place the packaged tubes in a secondary unbreakable container. Specimens may be shipped cold but *must*

not be frozen.

<u>All:</u> wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B (Packing Instruction

650).

Receiving Specimens

at DPHL:

Authorized specimens are received at the laboratory's rear (loading dock) entrance. Submitters must present ID and have proper forms completed.

Handling of Specimens: Chain of custody procedures must be followed. Urine specimens should be

frozen upon collection.

Reporting Results: Reference laboratory will notify DPHL as soon as possible. The Potential

Exposure Call Log and Information form will provide information for notification

of testing results outside of the DPHL.

Contact Information: Jane Getchell, DrPH, Director DPHL, 302-223-1520 (24/7 coverage)

24/7 Emergency Contact Number: 1-888-295-5156

Revised: 04/08